

Aviation slots: turn scarcity into a workable schedule

A practical lens on airport capacity, airline priorities and coordination.

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Start with declared capacity

At a constrained airport, a slot is an agreed planning permission for an arrival or departure at a coordinated time. It does not, by itself, remove the physical limits of runways, stands, terminal processes or airspace. IATA's Worldwide Airport Slot Guidelines provide the global framework for slot coordination. Local rules and the airport's coordination level still need to be checked for each market.

Capacity declarations should reflect the whole system. An apparent runway opportunity may be unusable if stands, baggage, border control or ground handling cannot serve it. Before making a schedule request, compare demand by time period with each relevant capacity constraint and the real passenger connection pattern.

- Map the tightest constraint for each scheduling window.
- Separate requested times from operationally viable times.
- Check local rules and coordinator guidance for the airport concerned.

Test the network consequences

A commercially attractive arrival time can have a poor outcome if it breaks connections, concentrates workload or creates an unreliable turn. Airline network planning, airport operations and commercial teams need a common view of route economics, fleet rotations, transfer times and disruption recovery.

Use scenarios to evaluate trade-offs: which changes improve connectivity while keeping a realistic ground operation? What happens if an adjacent departure moves twenty minutes? Include turnaround buffers and the likely effects on crews, gates, service quality and missed connections. A schedule that performs well on paper but badly in disruption erodes its own value.

- Assess the entire rotation, not a single movement.
- Quantify connectivity and resource effects together.
- Stress-test the schedule against typical disruption.

Build a disciplined coordination cycle

Slot management is a continuing process rather than an application at one deadline. Track requests, allocated times, changes, utilisation and any relevant local compliance rules through the season. Ensure teams share the current version of the schedule and that changes reach commercial and operational owners.

After each season, compare planned and actual performance. Identify where capacity assumptions were too optimistic and where a different schedule could improve reliability. The aim is not simply more flights; it is a network and airport operation that can deliver what was promised.

- Maintain one controlled schedule and decision log.
- Review utilisation and schedule changes with the coordinator as required.
- Use actual performance to shape the next season.

A schedule trade-off in practice

Suppose an airline asks for an arrival close to an established connection bank. Moving the flight nearer the bank may improve transfer demand, but it can also place another widebody on a constrained stand and overload baggage or border control. A good comparison uses more than one objective: projected passenger connections, turnaround reliability, infrastructure load, crew feasibility and commercial contribution.

First model the requested movement with actual stand and terminal capacity. Then test a feasible earlier and later time. Include an explicit disruption case: if the inbound arrives late, what aircraft, crew and transfer journeys are affected? Record the assumptions behind each option, and present the trade-off to airline and airport decision-makers in a format that shows what can be delivered, not only what is requested.

An available slot is not an obligation to schedule a service. The preferred option is the one whose value survives the physical and regulatory constraints relevant to that airport.

- Compare options against network value and operating reliability.
- Show the tightest resource in each schedule window.
- Check whether a proposed recovery buffer is sufficient.

A first-season management rhythm

Agree a single accountable owner for the seasonal request and a joint working group across scheduling, airport operations, commercial, finance and ground handling. Before coordination deadlines, confirm demand, declared capacity and any applicable local rules. After allocation, share a controlled master schedule and changes with all teams that depend on it. During the season, monitor planned versus actual operations and investigate recurrent deviations.

A post-season review should examine whether slot choices supported the network and passenger experience. Compare missed connections, turnaround variance, stand pressure and utilisation with the original business case. Capture what changed because of the schedule and what changed because of weather, airspace or external disruption. The resulting evidence should inform the next season's request and any investment in capacity.

- Pre-season: reconcile airline priorities and realistic capacity.
- In-season: maintain change control, utilisation and exception logs.
- Post-season: review reliability, economics and passenger consequences.

What this means for clients

Le Chene combines aviation operations, analytical and transformation expertise to help clients connect slot choices to reliable, commercially sensible delivery.

Further reading

IATA, Worldwide Airport Slot Guidelines

IATA, Airport Slots

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